In the Claims:

Please amend the claims as follows:

1-33 (cancelled)

34. (new) A method for a cardiac analysis, the method comprising:

acquiring an ECG-signal;

detecting at least one wave of the ECG-signal; and

calculating parameter values of said wave, wherein said wave is a P-wave,

whereupon the cardiac analysis is focused to dynamic changes of the configuration of the P-wave, wherein substantially every detected P-wave is compared to a reference P-wave in defined time period.

35. (new) The method according to claim 34, wherein the cardiac analysis is focused also to dynamic changes of the PQ-segment.

36. (new) The method according to claim 34, wherein the ECG-signal is in the form of a vectorcardiogram.

37. (new) The method according to claim 34, wherein a beat between two R-peaks is examined, whereupon said beat is classified into groups depending on whether the beat is having a duration between the predetermined time limit or the beat is having a duration under the

predetermined time limit, whereupon both said beats are analyzed separately.

38. (new) The method according to claim 34, wherein the P-wave is detected by a template method.

39. (new) The method according to claim 34, wherein the P-wave is detected by a pattern recognition method.

40. (new) The method according to claim 34, wherein the detected P-wave is stored in X, Y, Z leads.

41. (new) The method according to claim 34, wherein the detected P-wave is averaged in the predetermined time interval.

42. (new) The method according to claim 41, wherein at least one averaged P-wave is used as an initial reference P-wave, where the upcoming averaged P-waves are compared to.

43. (new) The method according to claim 34, wherein at least one loop of the P-wave is detected.

44. (new) The method according to claim 34, wherein the parameters of the P-wave in one-dimensional diagram are one or more of the following: the vector area, vector change area, P-area duplicity, PQ-vector magnitude, PQ-area and PQ change area.

45. (new) The method according to claim 34, wherein the parameters of the P-wave in two-dimensional diagram are one or more of the following: the vector loop area, vector change loop area and P loop area duplicity.

46. (new) The method according to claim 34, wherein the parameters of the P-wave in three-dimensional diagram are one or more of the following: the vector loop area, the vector change loop area, the angles of the azimun, the elevation, change vector, the P-QRS vector as well as the vector magnitude, change vector magnitude.

47. (new) The method according to claim 34, wherein the parameters of the P-wave in magnitude environment are one or more of the following: the vector magnitude area, the vector change magnitude area difference and the vector magnitude.

48. (new) The method according to claim 34, wherein the method comprises also the calculations of one or more of the following: the PQ-time, P-wave duration (P-dur), the length of the P-wave, the velocity of the P-wave vector loop.

49. (new) The method according to claim 34, wherein the ECG-signal is acquired from a Frank system or a 12-lead ECG-arrangement.

50. (new) The method according to claim 34, wherein the ECG-signal is acquired from a data storage unit that is independent of this invention and commercially available.

51. (new) The method according to claim 34, wherein results of the parameters are displayed in a trend curve.

52. (new) A cardiac analysis system, comprising:

first means for acquiring the ECG-signal;

second means for detecting at least one wave from the ECG-signal;

third means for calculating parameter values of said wave, wherein said wave is a P-wave, whereupon the cardiac analysis system is adapted to focus to dynamic changes of the configuration of the P-wave; and

means for comparing substantially every detected P-wave to a reference P-wave in defined time period.

53. (new) The system according to claim 52, being further adapted to focus to dynamic changes of the PQ-segment.

54. (new) The system according to claim 52, wherein the ECG-signal is in form of a vectorcardiogram.

55. (new) The system according to claim 52, being also adapted to measure a duration of the beat between two R-peaks, wherein the system is also configured to compare the beat to the predetermined time limit and classified the beat into the one of two groups depending on whether the duration is between the predetermined time limit or under the predetermined time

limit, wherein the system is also configured to analyze both groups separately.

56. (new) The system according to claim 52, being adapted to detect the P-wave by a template method.

57. (new) The system according to claim 52, being adapted to detect the P-wave by a pattern recognition method.

58. (new) The system according to claim 52, being adapted to store the detected P-wave in X, Y, Z leads.

59. (new) The system according to claim 52, being adapted to average the detected P-wave in the predetermined time interval.

60. (new) The system according to claim 52, being adapted to use the first averaged P-wave as a reference P-wave and to compare the upcoming averaged P-waves to it.

61. (new) The system according to claim 52, being adapted to detect at least one loop of the P-wave.

62. (new) The system according to claim 52, being adapted to acquire the ECG-data from a Frank system or a 12-lead ECG-arrangement.

63. (new) The system according to claim 52, being adapted to acquire the ECG-signal from a data storage unit that is independent of this invention and commercially available.

64. (new) The system according to claim 52, being adapted to display results of the parameters calculated in trend curve.

65. (new) A computer program product, comprising:

a computer readable storage medium on which is stored a computer program code for a cardiac analysis, which computer program code comprises first computer instructions configured to acquire the ECG-signal, second computer instructions configured to detect at least one wave from the ECG-signal and third computer instructions configured to calculate parameter values of said wave, wherein said wave is P-wave, whereupon the computer program code has instructions for focusing to the dynamic changes of the configuration of said P-wave, wherein said computer program code additionally comprises computer instructions configured to compare substantially every detected P-wave to a reference P-wave in defined time period.

66. (new) The computer program product according to claim 65, wherein, the cardiac analysis is focused also to dynamic changes of the PQ-segment.